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# **User's Manual**

***P75i***

User's Manual No. 980496-001

Rev. A

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## **FOREWORD**

This manual contains installation and operation information for the Polaroid P75i Series card printers.

## **RETURN MATERIALS AUTHORIZATION**

Before returning any equipment to Polaroid for in-warranty or out-of-warranty repair, contact Repair Administration for a Return Materials Authorization (RMA) number. Repack the equipment in the original packing material and mark the RMA number clearly on the outside. Ship the equipment, freight prepaid, to the address below:

Polaroid Digital ID Systems  
4650 Executive Blvd.  
Ft. Wayne, IN 46808  
[www.polaroid-id.com](http://www.polaroid-id.com)

Toll free number: 1-866-484-0611

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## **PRODUCT WARRANTY STATEMENT**

### **Printers**

All Polaroid Card Printers are warranted against defects in material or workmanship for twelve (12) months from the purchase date. Proof of purchase or shipment date is required to validate the warranty period. The warranty becomes void if the equipment is modified, improperly installed or used, damaged by accident or neglect, or if any parts are improperly installed or replaced by the user.

*Note: Products returned must be packaged in the original or comparable packing and shipping container. In the event equipment is not so packaged, or if shipping damage is evident, it will not be accepted for service under warranty. Surface transportation charges for return to customers in the continental United States is paid by Polaroid. Otherwise, Polaroid pays CPT (carriage paid to) nearest airport, customer pays customs, duties, taxes, and freight from airport to destination. If Polaroid determines that the product returned for warranty service or replacement is not defective as herein defined, the customer will pay all handling and transportation costs.*

### **Printheads**

Since printhead wear is part of normal operation, the original printhead is covered by a twelve (12) month warranty. Warranty period begins on purchase date.

To qualify for this warranty, the printhead must be returned to the factory or to an authorized service center. Customers are not required to purchase Polaroid supplies (media and/or ribbons) for warranty qualification. However, if it is determined that the use of other manufacturer supplies has caused any defect in the printhead for which a warranty claim is made, the user is responsible for Polaroid's labor and material charges required to repair the defect. The warranty becomes void if the printhead is physically worn or damaged or if it is determined that failure to follow the preventive maintenance schedule listed in the User's Guide has caused a defect in the thermal printhead for which a warranty claim is made.

### **Spare Parts**

All parts, printheads, maintenance kits, options kits, and accessories are warranted to be free of defects in material and workmanship for 90 days (except where otherwise noted) from date of purchase. This warranty becomes void if the item is modified, improperly installed or used, or damaged by accident or neglect.

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## **DECLARATIONS OF CONFORMITY**

89/336/EEC modified by 92/31/EEC and 93/68/EEC	EMC Directive	EN 55022 (1998)	RF Emissions control
	EMC Directive	EN 301489-3 V1.4.1	RF Emissions and immunity for radio equipment
	EMC Directive	EN 55024 (2001)	Immunity to Electromagnetic Disturbances
73/23/EEC modified by 93/68/EEC	Low voltage Directive	EN 60950 (1992) and Amendments A1 to A11 (1997)	Product safety
1999/5/CE	R&TTE Directive	EN300330-2 V1.1.1	Radio frequency interferences

For a formal Certificate, please contact Compliance Engineering at the Fort Wayne facility.



**Model:** P75i conforms to the following specification:

**FCC Part 15, Subpart A, Section 15.107(a) and Section 15.109(a) Class B digital device**

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference's by one or more of the following measures:

Reorient or relocate the receiving antenna.

Increase the separation between the equipment and the receiver.

Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

Consult the dealer or an experienced radio/TV technician for help.

The user may find the following booklet, prepared by the Federal Communications Commission, helpful:

How to identify and resolve Radio/TV Interference Problems. This booklet is available from the U.S. Government printing Office, Washington, D.C. 20402, Stock No. 004-000-00345-4.

Use of a shielded cable is required to comply within Class B limits of Part 15 of FCC Rules. Pursuant to Part 15.21 of the FCC Rules, any changes or modifications to this equipment not expressly approved by Polaroid may cause harmful interference and void the FCC authorization to operate this equipment.

## **INDUSTRY CANADA NOTICE**

This device complies with Industry Canada ICS-003 class B requirements.

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## INTRODUCTION

Thank you for choosing the Polaroid P75i Plastic Card Printer. These printers produce cards ideal for personalized identification, access control, visitor, membership, promotion and luggage cards, badges and tags. This manual guides you to efficient start-up and operation of your new Card Printer.

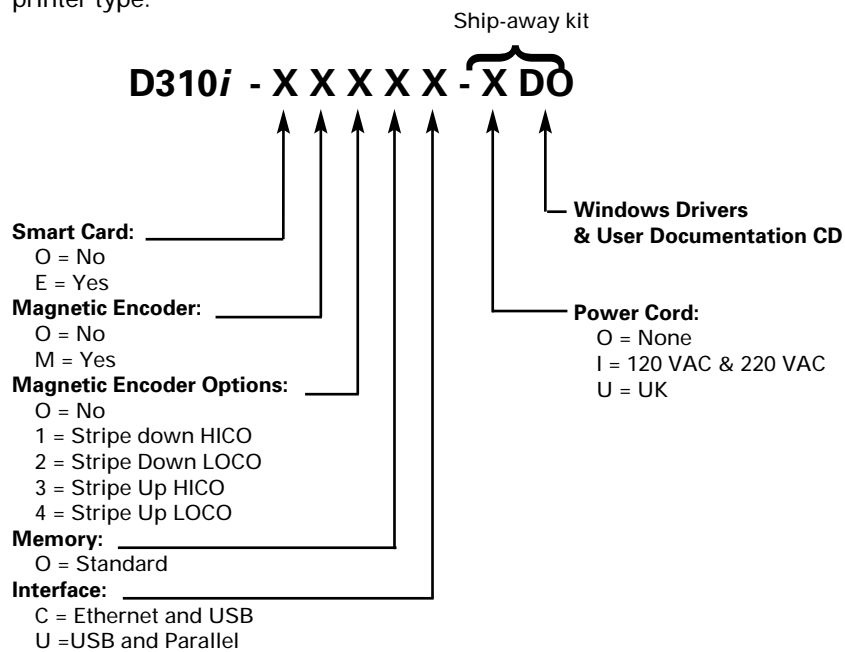
## P75i PRINTER MODELS

Polaroid's Product Numbers tell the story:

Here is a quick review of Polaroid's Card Printer Series numbering and lettering system to help you.

Polaroid's P75i Plastic Card Printer Series employ Dye Sublimation and Resin Thermal Transfer Technologies. Model numbers include identifiers that specify options and items in the Ship-Away kits.

Please refer to the Polaroid Card Printer Products Price List for available options by printer type.



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**ICONS** Throughout this manual, different icons highlight important information, as follows:



Important general information



Mechanical hazard, such as one associated with moving parts, capable of resulting in equipment damage or personal injury.



Electrical hazard, such as an exposed voltage point, capable of causing electrical shock and personal injury.



An area where electrostatic discharge (ESD) can cause component damage. Use a grounding wrist band.



Elevated temperature hazard, capable of producing a burn.



Keep Card Printer clean by minimizing cover open time.

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## **GETTING STARTED**

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### ***UNPACKING YOUR CARD PRINTER***

Your P75i printer ships in a carton and protective anti-static bag. Keep all packing material in case you need to move or re-ship the printer.

While unpacking, inspect the carton to ensure that no damage occurred during shipping.

Please ensure that you have a clean and nearly dust free environment for proper operation and storage of the printer.

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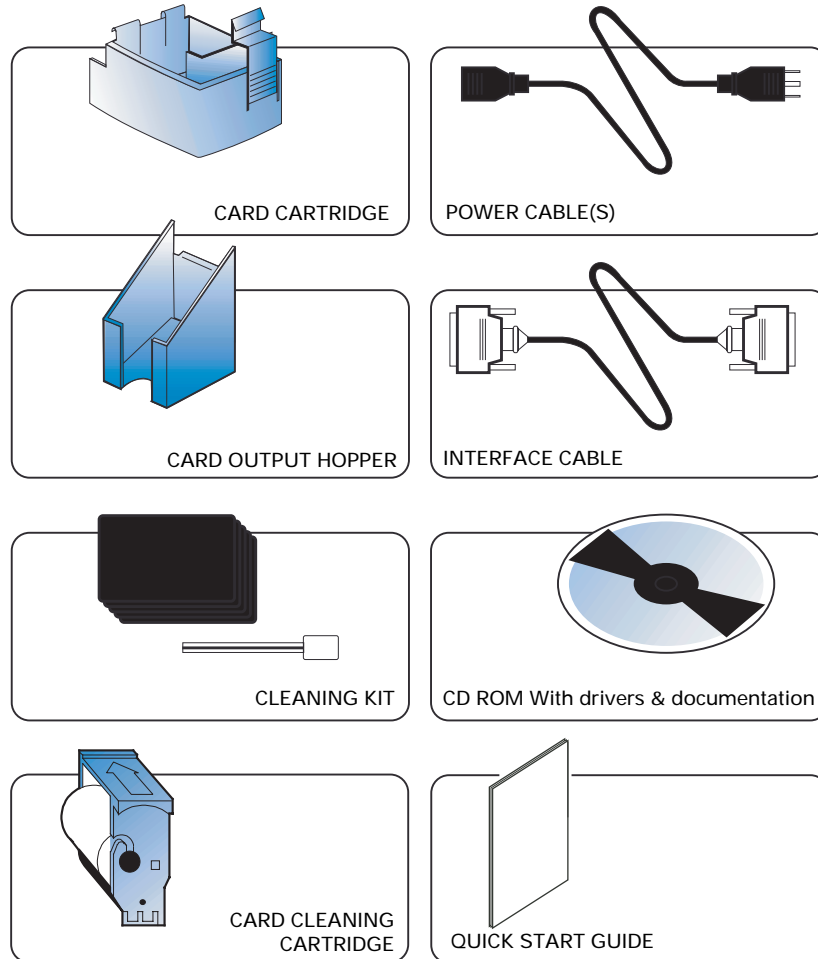
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In addition to user documentation, make sure the following items are included with your P75i printer.



If any items are missing, please contact your dealer.  
To reorder, please refer to Appendix C of this manual.

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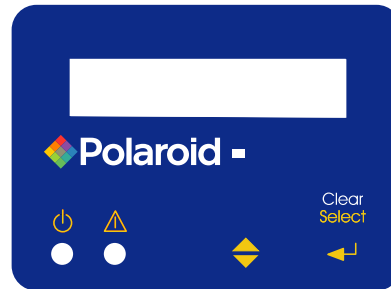
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## **INDICATORS AND CONTROLS**

Your P75i printer has an LCD display, two LED's and two panel buttons.



LCD Display: The 16 character LCD display is used for:

- Showing the printer current status
- Providing operator and service messages (Chapter 5)

LED's: The two LED's are used for:

- Green: Power LED
- Amber: Alert LED (with beeper)

This Alert LED is on when an error condition exists.

The beeper will sound three alert 'Beeps" and the LCD Display will show the associated error message.

Panel buttons: The menu Button (left) is a push button used for:

- bringing printer into menu mode when pressed with the printer showing READY on the LCD display.
- using in Menu Mode to scroll through Menu Options.

The Clear button (right) is a push button used for:

- clearing an error status (when LCD Display shows an error report and Alert LED is on)
- invoking automatic retry of the operation which gave the error.

NOTE: the buttons beep when pressed.

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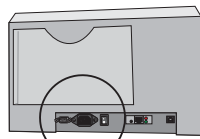
## **PRINTER INSTALLATION**

---

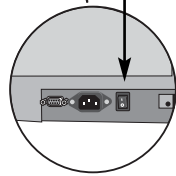
Use the following to guide you through the installation of your P75i Printer.



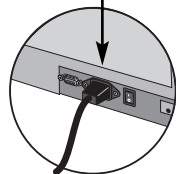
**CAUTION:** Limit AC power supplied to the P75i to 110 ~ 230 volts, 60 ~ 50 Hertz, for an associated 800 ~ 400 milliamps. Limit excess current draw to 16 amps or less, using an associated circuit breaker or other such device. Never operate the printer in a location where operator, computer, or printer can get wet. Personal injury could result. The electrical security of the printer is based on the reliability of the main power source.



**1.** Place the printer in a location that allows easy access to all sides. The printer should never be operated while resting on its side or upside down.



**2.** Place the power switch in the OFF (0) position.



**3.** Insert the power cable into the printer power socket and attach to grounded electrical socket of the proper voltage and type.

**Continued on following page**



**CAUTION:** Intermittent or unpredictable operation may occur from unsecured connectors. If damaged, the power cable must be replaced by an exact equivalent.

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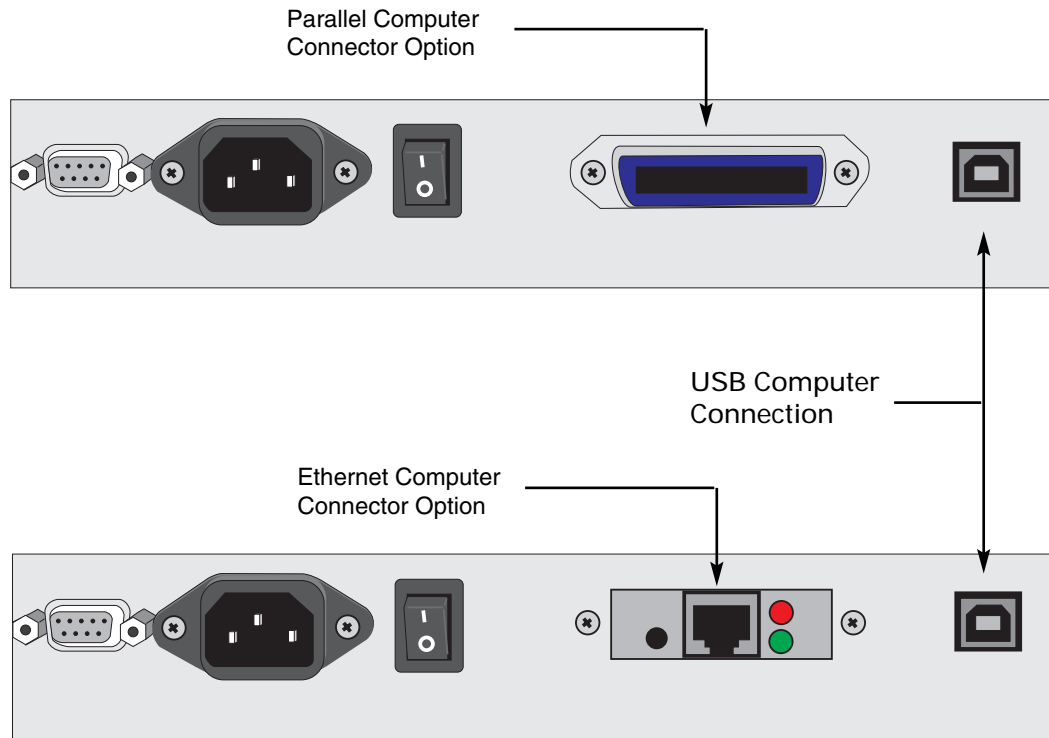
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4. Attach and secure the interface cable to printer and computer. Note: In printers with two-connectors, use the USB or the Parallel/Ethernet, never both.

5. Switch power on.



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**ETHERNET INDICATORS**

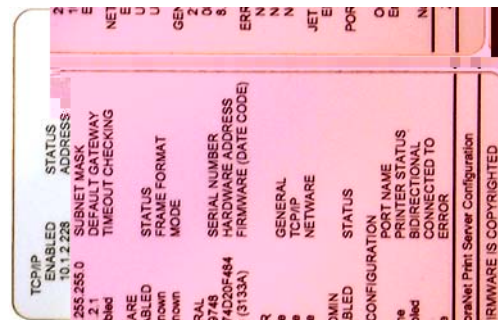
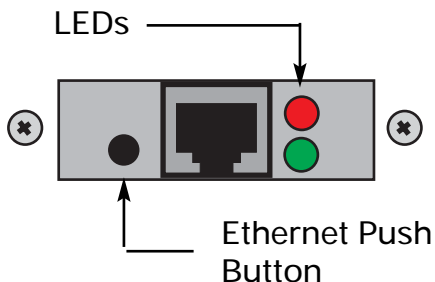
The following shows the function of the switch and indicators found on P75i Printers that use Ethernet Computer Interfaces.

LED	Action	Status Being Signaled
Red	Flashing	Power-On Self Testing
Red	Solid > 30 sec	Failure of Power-On Tests
Red/Green	Flashing Alternately	Firmware Download mode
Green	Solid > 30 sec	Proper Hardware Operation; Network Found
Green	Rapid Flashing (9/sec)	Network not Found
Green	Slowly Flashing (1/sec)	Print Job in Progress

**ETHERNET PUSH BUTTON**

Press the Ethernet Push button with the printer ON to get a Test Card.

Press and hold the Ethernet Push button while turning ON the Printer to perform a RESET.



Ethernet Test Card



You can refer to the ZebraNet® PrintServer II™ for Ethernet Networks Installation and Operation Guide for details regarding this interface,

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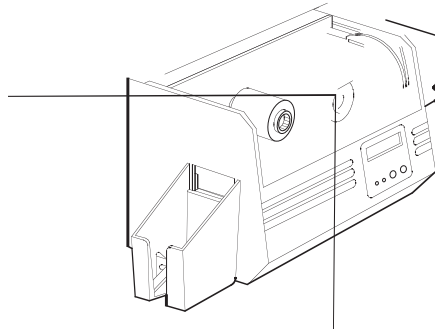
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# OPERATION

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## ***P75i PRINTER FEATURES***

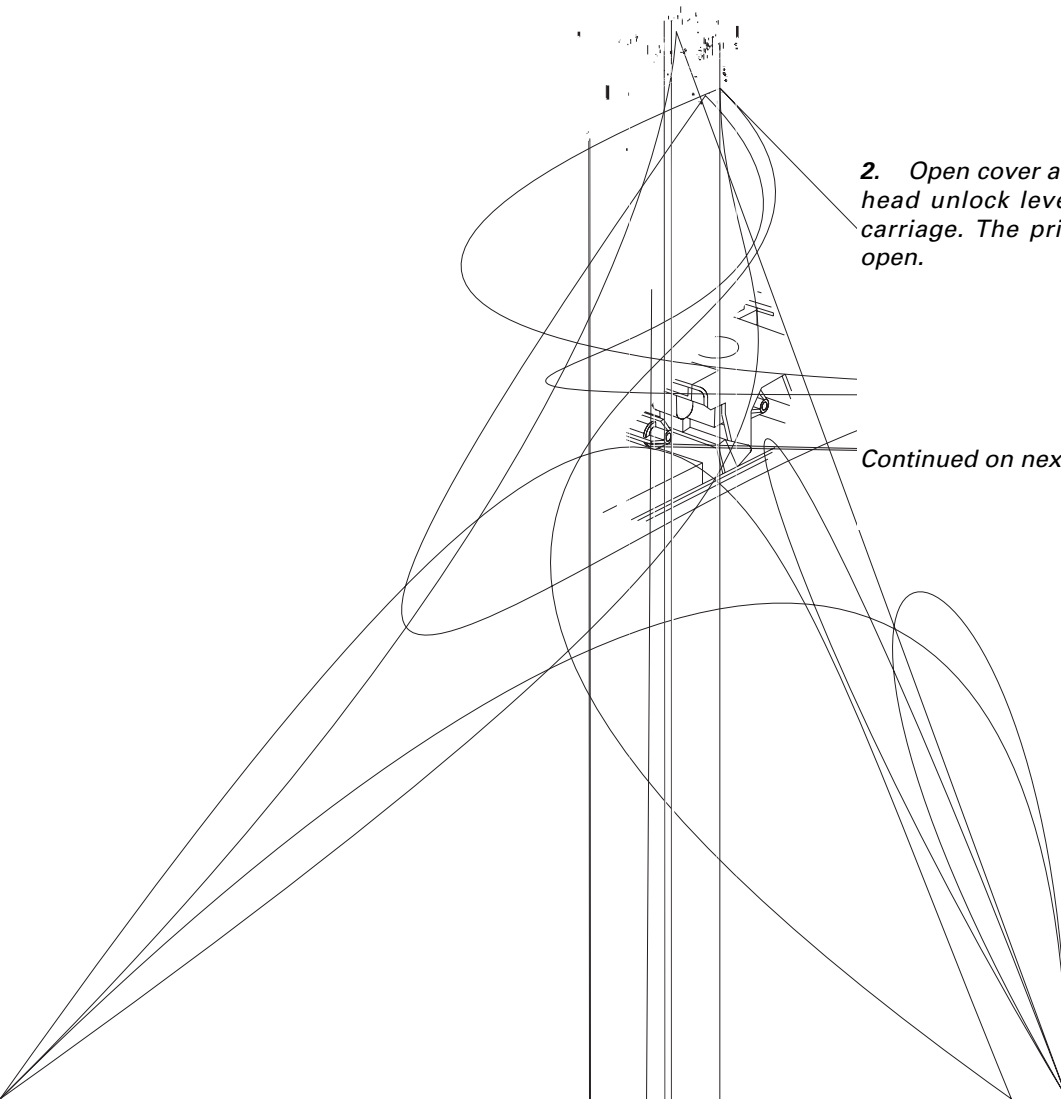
The following shows the features found on your **P75i** Printer.



1. Remove ribbon from packaging.

2. Open cover and press down on the print head unlock lever to open the print head carriage. The print head carriage will pop open.

Continued on next page .....





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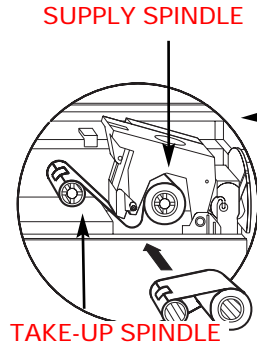
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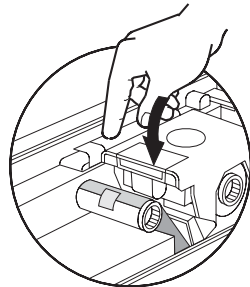
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**3.** Load ribbon onto the supply spindle (under print head carriage) and empty core (with tape attached) onto the take-up spindle flange side in. Make sure the ribbon comes off the top of the supply spindle and feeds to the top of the take-up spindle.

'CLICK'



**4.** Push down on the Print Head Lock Lever until an audible 'click' signals the locked-down position.

**5.** Close Cover.



Please note that the ribbon automatically synchronizes whenever the print head lock down occurs.

The ribbon specifications will be sent to the printer and the driver parameters will automatically be set.

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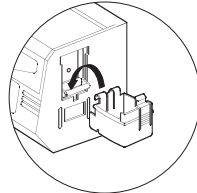
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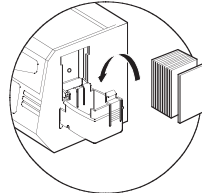
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**LOADING CARDS** To help you load, print, and collect cards, the P75i is equipped with the following items:

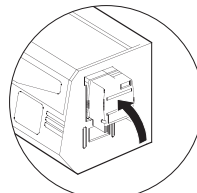
**A - CARD CARTRIDGE**  
For loading cards.



1. *Open Feeder door.*



2. *Install cards into Cartridge.*



3. *Close Cartridge.*



DO NOT bend cards or touch print surfaces as this can reduce print quality. The surface of the cards must remain clean and dust free. Always store cards in an enclosed container. Ideally, use cards as soon as possible. If cards stick together, carefully shuffle them.

---

\* See Chapter 6, *Technical Specifications*, for card requirements and capacities.

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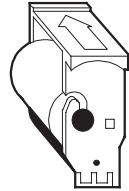
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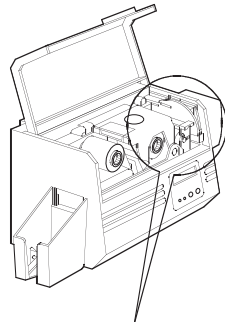
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## **B - INSTALL CARD CLEANING CARTRIDGE**

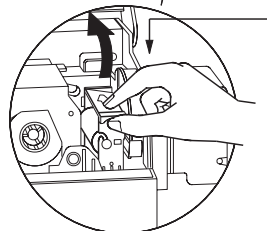
*This item is used to clean the cards entering the printer.*



- 1.** *Remove Card Cleaning Cartridge from packaging. Peel protective wrapper from adhesive roller.*



- 2.** *Open Printer cover and remove the yellow reminder tape from the location for the Cleaning Cartridge.*



- 3.** *Make sure the arrow on top of the assembly is facing toward the rear of the printer. Hook assembly into slot on printer and rotate down. Ensure the assembly locks in place.*

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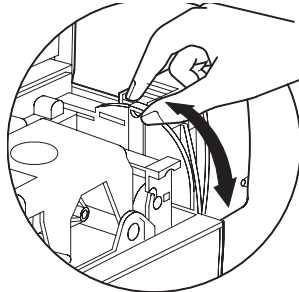
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**C - CARD THICKNESS CONTROL LEVER**

This item is operated by the user to prevent more than one card feeding into the printer at the same time and causing a jam.



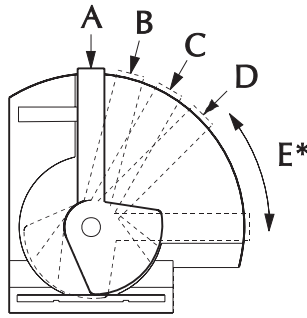
Open Cover, and adjust lever to correct position. Repeat for different card thickness. (Factory setting is for 30mil (0.762mm) card thickness. See diagram below:

**Card Thickness:**

- A - 60mil (1.524mm) to 50mil (1.27mm)
- B - 40mil (1.016mm)
- C - 30mil (0.762mm)
- D - 20mil (0.5mm)
- E - < 20mil (0.5mm)

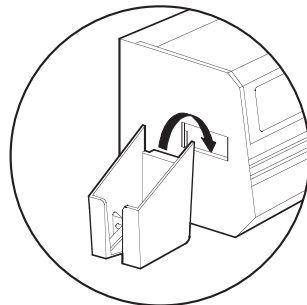
For other card thickness, start lever at lowest position and move up until cards feed.

\* Start at lowest position and move lever up to match card thickness.



**D - CARD OUTPUT HOPPER**

For collecting printed cards.



Install Card Output Hopper onto printer by hooking over bottom edge of card exit aperture.

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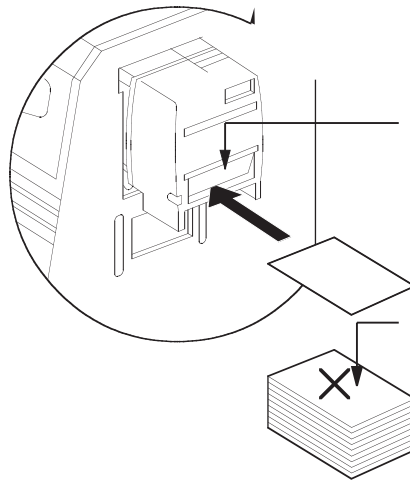
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### ***FEEDING ONE CARD AT A TIME***

A Manual Feed Slot is available on the side of the Card Input Hopper for feeding single cards. Cleaning Cards are fed manually through this slot. The Card Cartridge must be empty for manual card feeding to work properly.



*For one-at-a-time printing, feed cards through slots on side of Feeder.*

*Do not feed more than one card at a time.*

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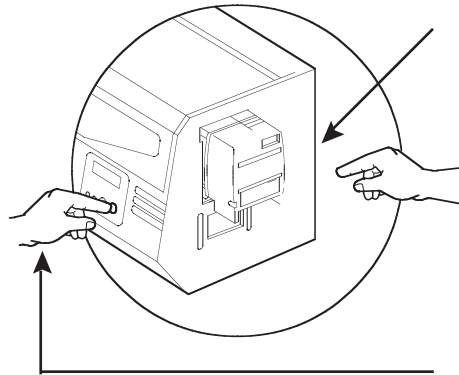
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**PRINT A TEST CARD**

With ribbon and cards loaded, your P75i printer is ready to print. To check the operation of the printer you should print a test card.



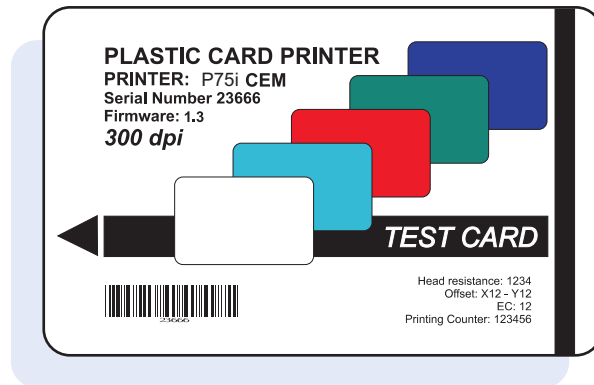
**1.** Place the printer's power switch in the OFF (0) position.

**2.** While pressing the Clear (Next) panel button, switch printer on. LCD screen will show 'SELF TEST'.

**3.** Release button once 'SELF TEST' is displayed on LCD screen.

**4.** A test card will print after a few seconds. LCD display will show printing status.

This is an example of the test card.



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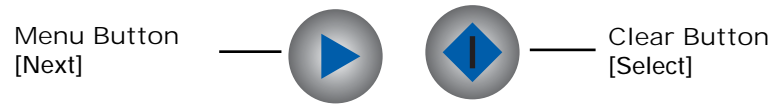
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## *Printer Menu information*

The printer is equipped with a LCD Display and two key buttons which provides access to printer menus. Press the Menu button to enter the Menu Mode.

The top line display shows menu information. The second line of the display clarifies the function of the two [Next] and [Select] key buttons relative to the current menu item.

The printer will return to READY Mode if either of the two key Buttons is not pressed within ten seconds of entering Menu mode.

[See next page:](#)

### *P75i LCD Menu Tree*

\* If the printer is equipped with a Magnetic Stripe Encoder.

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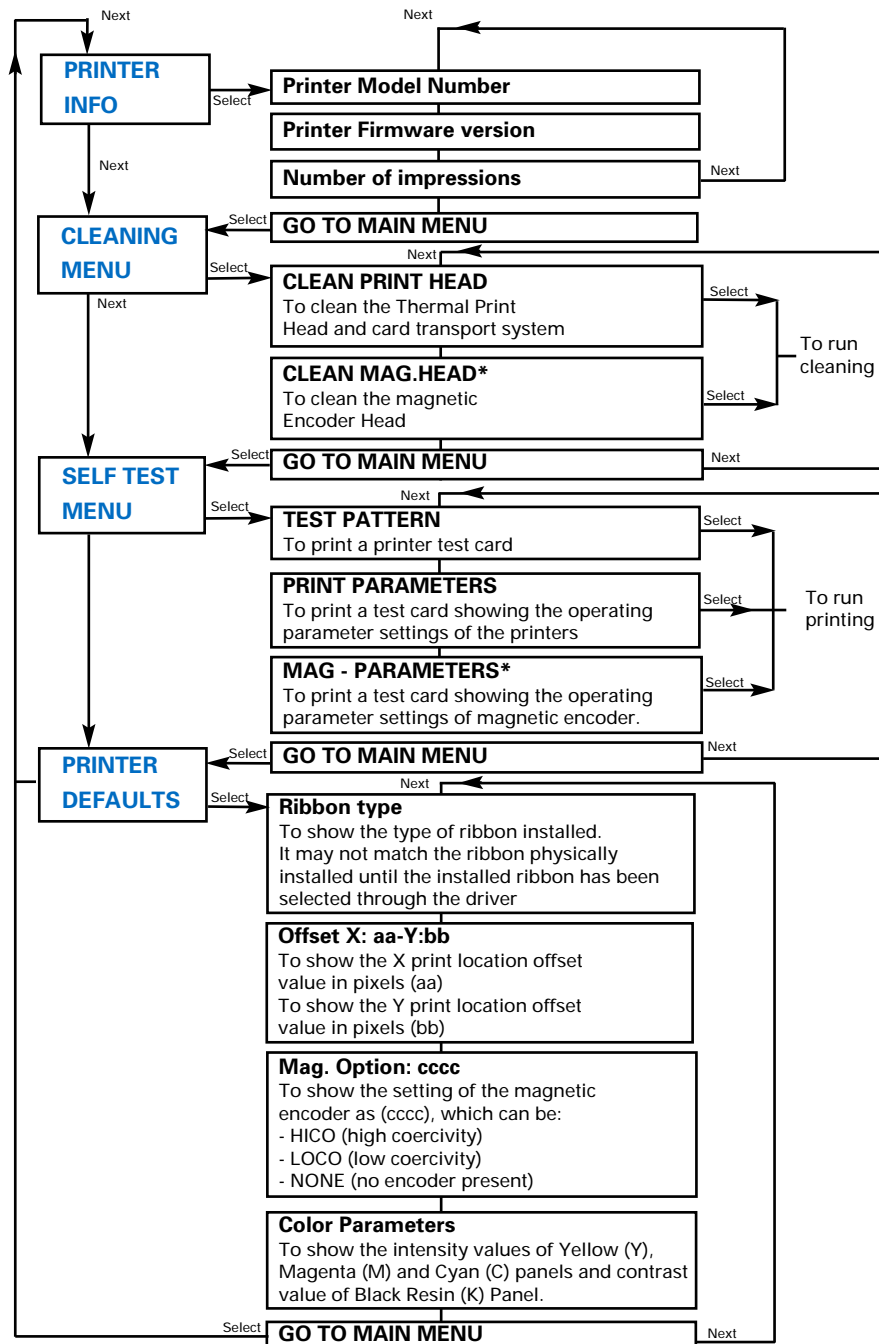
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## ***PRINTING A SAMPLE CARD***

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Printing with the P75i Printer requires the Windows Printer Driver, your card design/issuing software or printer command level programming through the printer interface.

The P75i Card Printer can be used with any Windows 95/98/Me or Windows NT4.0/2000/XP software application program, using the drivers provided on CD with the printer.

This section contains information on the printing of a sample card in color (using the 5-panel color ribbon YMCKO) and the Windows Printer Driver.

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## Install the P75i Printer Driver

To install the P75i Printer Driver Automatically on all Operating Systems, Use the Polaroid Install Wizard.

To ensure the accuracy of driver installation, it is recommended that you



Always make sure that USB is NOT connected before running the installer.

use the Polaroid Install Wizard that is provided with your documentation CD.

### The Wizard will:

- a • Check to see which operating system you are using
- b • Delete previous versions of the driver and clean up any unnecessary Registry entries



On NT, Windows 2000, and XP systems, ensure that you have administrative privileges to perform this installation or contact your IT department.

- c • From the main menu of your documentation CD, select your desired language and then select "DRIVERS" from the subsequent menu. The Install Wizard will walk you through the appropriate steps.

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### Set Printer Driver Options:

The P75i Printer screen appears. Change the options as follows:

1• On the Device Settings tab the magnetic encoder feature is automatically enabled. If you need to change settings for a Magnetic Encoder, select Magnetic Encoder settings button.

2• On the Advanced tab select card orientation: Landscape or portrait - Select "Landscape".  
(in NT, this is located under Document Defaults. In Windows 2000, it is located under Print preferences.)

3• In the Ribbon section, the ribbon type is automatically detected and enabled for you.

4• In the same tab, go to Black Panel area and select Text Only. This option allows text printing using the Black Resin Panel from the Color Ribbon.

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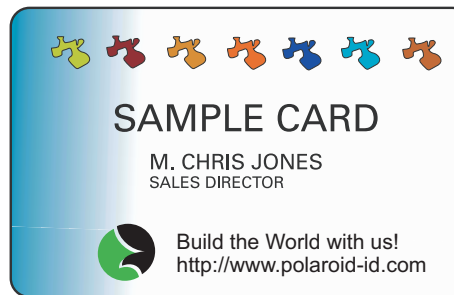
**Appendix C**

## Print a sample card:

Follow the steps below to print your first card

Go to the Microsoft Word Software.

If the printer was not selected as the default printer, go to the **File** menu, Select **Printer** and choose **Polaroid P75i Card Printer** from the printer names list. Then **Close** the print dialog box.



Come back to the **File** menu and choose **Page Setup**.

Select **Paper Size** tab and in **Paper Size** choose **Card**. Then select the orientation: "landscape".

Go to **Margins** tab, put the Top, Bottom, Left and Right margins with 0 values.

Press **OK** to close Page Setup window.

The card appears on the screen.

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## CLEANING



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### PROTECT YOUR FACTORY WARRANTY!

The recommended maintenance procedures must be performed to maintain your factory warranty. Other than the recommended cleaning procedures described in this manual, allow only Polaroid authorized technicians to service the P75i Printer.

**NEVER** loosen, tighten, adjust, or bend, etc. a part or cable inside the printer.

**NEVER** use a shop air compressor to remove particles in the printer.

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## **CLEANING SYSTEM**

Your P75i Printer includes a simple cleaning system using the Pre-Saturated Cleaning Cards provided. The regular use of these cards will clean and maintain important parts of your printer: including the Print Head and Transport Rollers.

**CLEAN PRINTER**

### **WHEN TO CLEAN**

*When LCD screen reports message.*

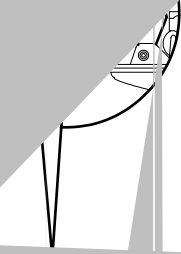
### **HOW TO CLEAN**

- 1. Leave power on.  
Open Cover and release Print Head Bracket to remove ribbon.  
Close Print Head bracket.  
Close Cover. Remove cards from Card Feeder.*
- 2. Insert one Pre-Saturated Cleaning Card (provided) through slot on the side of the Card Feeder Cover.*
- 3. Press the right Panel Button for a few seconds. The card will feed into printer and carry out the cleaning process. Repeat the process with a new Cleaning Card if necessary.*



Although the CLEAN PRINTER message is displayed until the cleaning process has been performed, the printer will continue to operate.

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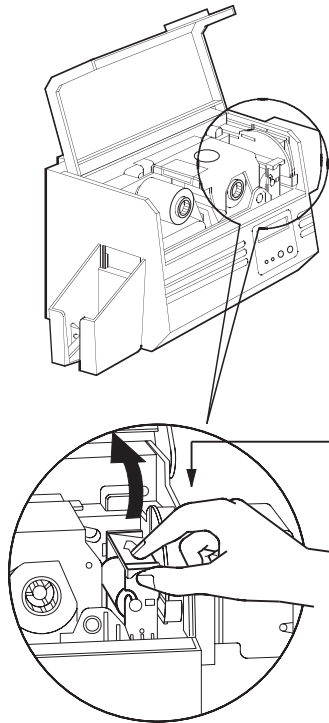
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## **CARD CLEANING CARTRIDGE**

Your P75i Printer also has a Card Cleaning Cartridge. This item cleans the cards entering the printer. To ensure print quality, the cleaning roller requires periodic replacements.



### **WHEN TO MAINTAIN**

*Replace the cleaning cartridge roller each time you install a new ribbon. A cleaning roller is included with every i Series ribbon. If a cleaning card will be run, use the Cleaning Card before replacing Cleaning Roller.*

### **HOW TO MAINTAIN**

- 1.** *Open Cover and locate Cleaning Cartridge.*
  
- 2.** *Gently remove by rotating up and away from printer.*

*Continued on next page...*



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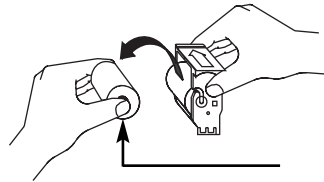
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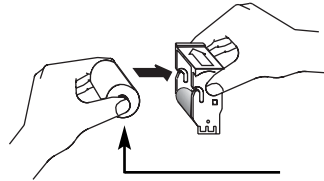
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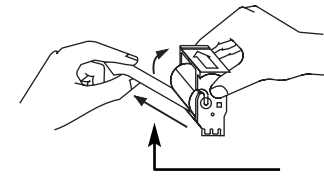
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**3.** Remove Cleaning Roller from Cartridge and discard.

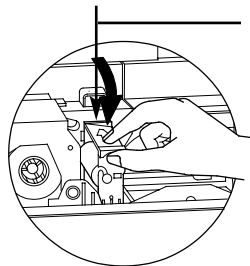


**4.** Install new Cleaning Roller into Cartridge\*. To avoid contamination, always hold the Cleaning Roller assembly by the ends.



**5.** Carefully peel off wrapper from new Cleaning Roller while in Cartridge.

SLOT



**6.** To replace Cartridge into printer: Make sure the arrow on top of the assembly is facing toward the rear of the printer. Hook assembly into slot on printer and rotate down. Ensure the assembly locks in place.

**DO NOT** touch the roller surface that contacts the card.

**7.** Close Cover.

\* See Appendix C for replacement Cleaning Rollers.

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## 5 TROUBLESHOOTING

This section offers solutions to potential problems you may experience with your P75i printer. The table below lists the screen messages that will be displayed on the printer's LCD, both during normal operation and to alert operator of any error conditions. There is also some additional information dealing with quality issues concerning printing onto cards.

SCREEN MESSAGE	MEANING	ACTION
<b>INITIALIZING</b>	The printer is performing an internal test before use	Wait for the ready message
<b>READY</b>	Ready for use	
<b>WAIT TEMPERATURE</b>	Print Head cool down mode	Wait for READY message
<b>SELF TEST</b>	Self test card printing	Wait for test card
<b>DOWNLOADING DATA</b>	The card data is being transmitted	Wait for card printing to start
<b>PRINTING YELLOW</b>	The yellow panel is being printed	
<b>PRINTING MAGENTA</b>	The magenta panel is printing	
<b>PRINTING CYAN</b>	The cyan panel is printing	

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SCREEN MESSAGE	MEANING	ACTION
<b>PRINTING BLACK</b>	A monochrome panel is being printed	
<b>PRINTING VARNISH</b>	The overlay is printing	
<b>PRINT HOLOGRAM</b>	A hologram overlay is printing	
<b>CLEAN PRINTER</b>	The printer is prompting operator maintenance	Carry out the cleaning procedure as detailed in section 4 of this manual
<b>CLEAN MAG HEAD</b>	The printer is prompting operator	Carry out the cleaning procedure as detailed in Appendix A of this manual
<b>CLEANING</b>	The printer is performing an internal cleaning routine	
<b>REMOVE RIBBON</b>	The ribbon has not been removed while the cleaning operation is in progress	Remove ribbon
<b>OUT OF RIBBON</b>	The printer ribbon has run out	Replace printer ribbon
<b>MECHANICAL ERROR</b>	The printer has an error moving the card internally	Remove the jamed card. Ensure the card is not out of specification
<b>OUT OF CARD</b>	The card feeder is empty	Add more cards or adjust the card feeder to accept the cards
<b>COVER OPEN</b>	The cover is open	Close the cover
<b>HEAD OPEN</b>	The print head is not locked into position	Lock the print head in its lower position
<b>COMMAND ERROR</b>	The data being sent from the host is not recognised	Check that the data is suitable for printing. Try reprinting a card from known "good" data
<b>PARAMETERS ERROR</b>	The features of the card are not recognised	Check the windows driver options and printer type

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SCREEN MESSAGE	MEANING	ACTION
<b>ENCODING ERROR</b>	Data cannot be written or read from the card's magnetic stripe	Check that the cards are loaded with the magnetic stripe in the correct orientation. Check whether high or low coercivity cards have been specified. Check that the data conforms to ISO specifications. See Appendix A of this manual for further information.
<b>READING ERROR</b>	Data cannot be read from the card's magnetic stripe	Check that the cards are loaded with the magnetic stripe in the correct orientation. Check whether high or low coercivity cards have been specified. Check that the data conforms to ISO specifications. See Appendix A of this manual for further information.
<b>MAGNETIC ERROR</b>	The printer cannot detect a magnetic stripe on the card	Check the card orientation
<b>FLASH ERROR</b> <b>OR</b> <b>NO ACCESS</b>		Contact your dealer for technical support

**Ribbon Errors:** Check that the print ribbon has not 'run out'. Lock and then unlock the print head assembly; this resynchronises the ribbon automatically. When using a color ribbon, it should advance automatically so that the leading edge of the Yellow panel is beneath the print head. Ensure that the correct ribbon type has been specified in the Windows driver.

**Card Feed & Mechanical Errors:** Ensure that the card thickness adjustment has been set-up correctly to allow one card to feed.

**Magnetic Encoding Errors:** Check that the cards are inserted correctly in the printer. Ensure that the cards are low or high coercivity as required, and are set-up correctly in the printer driver (Appendix A).

**Cleaning Alert:** The printer has counted the number of cards printed and has automatically flagged that a cleaning routine needs to be carried out. (See Chapter 4).

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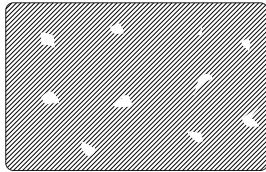
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## Print Quality Issues

This section will help you resolve print quality problems. The print quality is dependent on several factors. The two most important factors that will increase your print quality are cleanliness and card stock. To diagnose and fix print quality problems, follow the troubleshooting procedure below:

NOTE: The Polaroid *i* Series ribbon is specifically designed to be compatible with all Polaroid *i* Series printers. Use of a Print Ribbon other than the Polaroid *i* Series may result in poor print quality, which the following fixes may not correct. To ensure compatibility and print quality, always use Polaroid *i* Series ribbons.

**• Small spots appear on the printed card with a non-printed area or a different color.**



### Possible Cause

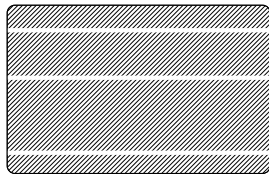
- A. Contamination on the card surface.
- B. Dust inside the printer and/or dirty Cleaning Roller.

### => Solution

- A1. Check that cards are stored in a dust free environment
- A2. Use a different supply of cards.
- B1. Perform a Cleaning of the printer (see Cleaning section).
- B2. Replace Cleaning Roller (see Cleaning section).

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• **There are non-printing horizontal lines (white) on the card surfaces.**

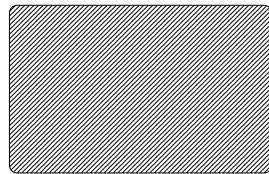


Possible Cause

- A. Ribbon is not correctly positioned.
- B. Print Head may be dirty.
- C. Print Head elements may have been damaged (e.g. scratched or burnt).

=> Solution

- A1. Open cover and press down the Print Head Unlock Lever to open the Print Head carriage. The Print Head will move up.
- A2. Check that the ribbon is properly rolled onto the ribbon cores and there are no wrinkles in the ribbon.
- A3. Push down on the Print Head Lock Lever until an audible «click» signals the locked-down position.
- A4. Ribbon will automatically synchronize.
- A5. Print again.
- B1. Perform a Cleaning of the Print Head (see 4.2 Cleaning the Print Head).
- C1. Call service for Print Head replacement information.



• **Poor Print Quality**

Possible Cause

- A. Ribbon may have been stored improperly or is damaged.
- B. Cards may not meet specifications.
- C. Contrast and/or Intensity may be set to values which are too high.
- D. Dust or embedded contamination on elements of the Print Head.

=> Solution

- A1. Change ribbon and print again.
- B1. Use a different supply of cards.
- C1. Adjust Contrast and/or Intensity values in software
- D1. Perform a cleaning of the Print Head (see "Cleaning the Print Head")

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**• Printing is blurry**



Possible Cause

- A. Ribbon may not be correctly positioned
- B. Ribbon may not be synchronized on the correct color panel position.
- C. Cards may not meet specifications.
- D. Dust inside the printer and/or dirty Cleaning Roller.

=> Solution

- A1. Open cover and press down the Print Head Unlock Lever to open the Print Head carriage. The Print Head will move up.
- A2. Check ribbon is properly rolled on ribbon cores.
- A3. Push down on the Print Head Lock Lever until an audible «click» signals the locked-down position.
- A4. Ribbon will automatically synchronize.
- A5. Print again.
- B1. Open cover and press down the Print Head Unlock Lever to open the Print Head carriage. The Print Head will move up.
- B2. Push down on the Print Head Lock Lever until an audible «click» signals the locked-down position.
- B3. Ribbon will automatically synchronize.
- B4. Print again.
- C1. Use a different supply of cards.
- D1. Perform a cleaning of the Print Head (see 4.2 Cleaning the Print Head.)
- D2. Replace Cleaning Roller (see "Cleaning Cartridge")



**• No printing on the card**

Possible Cause

- A. Ribbon may not be installed in the printer
- B. Cards may not meet specifications.
- C. Cable on Print Head may be disconnected.
- D. Print Head elements may be scratched or burnt.

=> Solution

- A1. Check for ribbon in the printer.
- B1. Use a different supply of cards.
- C1. Power off the printer and check the Print Head cable connections.
- D1. Call Service for Print Head replacement information.



For optimum print quality, always keep cover of the printer closed except during ribbon loading and card thickness control procedures.

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## TECHNICAL SPECIFICATIONS

### General

- High speed printing, over 144 cards/hour edge to edge in full color (YMCKO) throughput
- Small footprint
- Windows Drivers for 98, NT 4.0, Win2000, XP, Me
- One year printer warranty
- One year print head warranty

### Color Printing

- Color dye sublimation or monochrome thermal transfer printing
- 25 seconds per card edge to edge in full color (YMCKO)
- 300 dpi (11.8 dots/mm) print resolution
- Edge to edge printing standard

### Bar Codes

- Code 39
- Code 128 B & C with & without check digit
- 2 of 5 & 2of 5 industrial
- UPCA
- EAN8 & EAN13
- PDF 417 2D bar code and other symbologies available (Not resident in printer)

### Fonts

- True Type fonts available via Windows Driver



*i* Series printers require the use of *i* Series Ribbons for full color printing. Refer to the accessories section for more information about Card and Ribbon Media available from Polaroid Corp.



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### **Cards\***

- Types PVC, Composite
- Card width/length: ISO CR-80 - ISO 7810, 2.125" (54mm) by 3.375" (86mm)
- Option: Magnetic Stripe - ISO 7811
- Option: Smart Card - ISO 7816-2
- Card thickness: 0.76mm to 1.524mm
- Card Feeder capacity: 75 cards (30 mil)
- Card Output Hopper capacity: 100 cards (30 mil)

### **Ribbons\***

- Monochrome: 1000 cards/roll
- Monochrome colors: black, red, blue, green, silver, gold, white.
- K-resin + O: 500 cards/roll
- K-dye + O: 500 cards/roll
- YMCKO: 330 cards/roll

### **Overlay varnish**

- Thermal transfer
- 4 microns thick
- Clear and holographic options:
  - Clear
  - Genuine/Secure Hologram
  - Custom Hologram

### **Interfaces**

- Centronics Parallel and USB Standard
- Ethernet Optional

### **Mechanical**

- Length: 16.68" (426.35 mm†)
- Depth: 10.01" (254.31 mm†)
- Height: 10.47" (265.9 mm†)
- Weight: 23 lbs (10.43 kg)

† Measured without card output hopper.

### **Electrical**

- 110 ~ 230 Volts AC, 60 ~ 50 Hz
- FCC Class B, CE, UL, and CUL approved

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## **Environmental**

- Operating Temperature: 60 to 86°F (15 to 30°C)
- Operating Humidity: 20 to 65% non condensing
- Storage Temperature: 23 to 158°F (-5 to 70°C)
- Storage Humidity: 20 to 70% non condensing
- Ventilation: Free air

\* Thermal transfer (Resin) ribbons offer more durability than dye sublimation, with greater resistance to scratches and UV-induced fading.

Dye Sublimation printing requires dye sublimation ribbons, with either black or cyan, magenta, and yellow (plus black resin) panels.

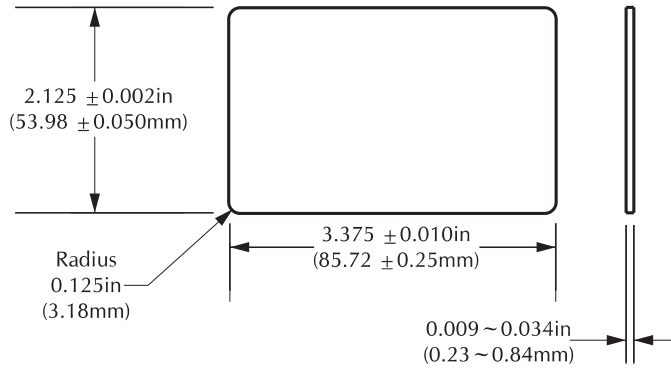
## **Options**

- Centronics Cable
- Smart Card Contact Station (0.76mm cards only)
- Magnetic Encoder (0.76mm cards only)
- Cleaning supplies

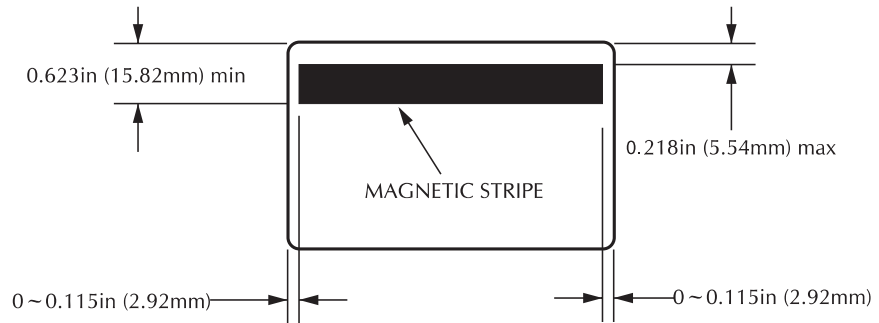
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**CARD DIMENSIONS**

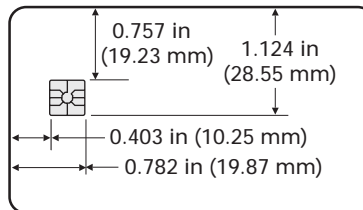
ISO STANDARD DIMENSIONS FOR PLAIN CARD



ISO STANDARD DIMENSIONS FOR MAGNETIC STRIPE CARD



CHIP POSITION FOR SMART CARD



ISO 7816 Cards

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## *APPENDIX A*

### **Magnetic Card Stripe Encoder**

This section contains information on the additional operations of the P75i Printers with Magnetic Card Stripe Encoder. (See Chapter 2 for location.)

#### **INTRODUCTION**

Operation and maintenance requirements for the P75i Printer with the optional magnetic card stripe encoder.

(See Chapter 2 for location).

The magnetic encoder can be set for either high or low coercivity.

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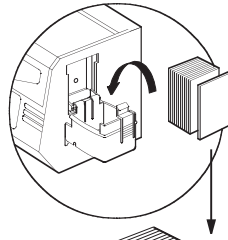
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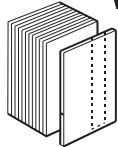
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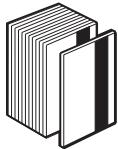
**A - MEDIA LOADING ORIENTATION**



STRIPE  
DOWN



STRIPE  
UP



The magnetic encoder is a factory installed item with the read/write head positioned below the card path, available with HICO encoding (P75i CM1 or P75i CEM1) or LOCO encoding (P75i CM2 or P75i CEM2).

When loading cards into the Card Cartridge, please ensure that the magnetic stripe is facing down and closest to the rear.

Also available are Printer models with the Magnetic Read/Write head positioned above the card path, with HICO encoding (P75i CM3 or P75i CEM3) or LOCO encoding (P75i CM4 or P75i CEM4).

When loading cards, please ensure that the magnetic stripe is facing up and closest to the rear.

**NOTE:**

M1 = Stripe Down HICO  
M2 = Stripe Down LOCO

M3 = Stripe up HICO  
M4 = Stripe up LOCO

Approved HICO & LOCO PVC Cards are available. (See Appendix C).



ONLY USE cards that comply with ISO 7810 & 7811 standards for magnetic stripe cards. The magnetic stripe must be flush to the surface of the card to work properly. Never use taped-on magnetic stripes.

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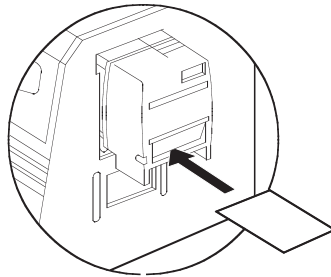
**Appendix C**

**B - MAGNETIC ENCODER CLEANING**

There exists two different processes to clean the Magnetic Stripe Encoder. The first process consists of a standard cleaning of the printer. This cleans the most important parts of the printer; including the Print head, Transport Roller and Magnetic Stripe Encoder (refer to chapter 4 "Cleaning" for more instructions).

The second process consists of a cleaning of the Magnetic Encoder using the Menu Button from the LCD Display.

To access the Magnetic Encoder Cleaning Menu proceed as below:



1. Leave power on.
2. Remove cards from the Card Feeder
3. Insert one Pre-Saturated Cleaning Card (provided) through slot on the side of the Card Cartridge.
4. Press the Menu button until the LCD screen shows CLEANING MENU.
5. Press the Select button to select.
6. Press the Menu button again until the LCD screen shows CLEAN MAG HEAD.
7. Run this operation by pressing the Select button.

Track #	Field Separator	Track density	Valid Characters	# of characters
1	^	210 BPI*	Alphanumeric (ASCII 20-95†)	79‡
2	=	75 BPI*	Numeric (ASCII 48-62)	40‡
3	=	210 BPI*	Numeric (ASCII 48-62)	107‡

\* Bit per inch  
 † Except the '?' character  
 ‡ Including Start, Stop and LCR characters. Also note that these 3 characters are automatically managed by the magnetic encoder according to the ISO Standard Norms.

NOTE: Refer to the Card Printer Programmer's Manual for complete programming information.

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## *APPENDIX B*

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### **Smart Card Contact Station**

This section contains information on the additional operations of the P75i Printers with Smart Card Contact Stations. (See Chapter 2 for location.)

#### ***INTRODUCTION***

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Smart Cards can have a built-in microcomputer and a battery. Card Memory can store fingerprints, voice recognition patterns, medical records and other such data. The P75i printer may be equipped with an optional contact station for programming Smart Cards (ISO 7816). This printer model responds to commands that position the cards at the contact station, where the printer connects to the contacts on the Smart Cards. All other printer operations remain the same as the standard P75i model.

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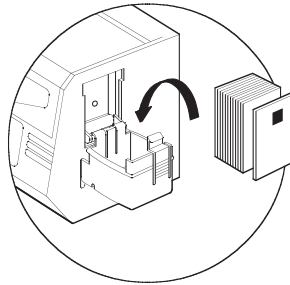
**Specifications**

**Appendix A**

**Appendix B**

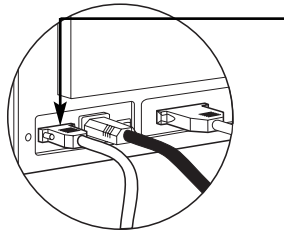
**Appendix C**

**A - MEDIA LOADING ORIENTATION**



*Position the cards with the Smart Card Chip at the top of the card and towards the printer.*

**B - SMART CARD CONTACT STATION INTERFACE**



*When a command to the parallel printer interface sends a card to the Smart Card Contact Station, the printer connects the Smart Card Contact Station to the female DB-9 connector on the rear of the printer.*

*An attached external Smart Card Programmer can be used to program Smart Card chips.*

DB - 9 PINS	SMART CARD CONTACT POINTS	DB - 9 PINS	SMART CARD CONTACT POINTS
1	C1 (VCC)	6	C6 (Vpp)
2	C2 (Reset)	7	C7 (I/O)
3	C3 (Clock)	8	C8 (RFU)
4	C4 (RFU)	9	(GND when chip is at station)
5	C5 (GND)		

Refer to the Card Printer Programmer's Manual for complete programming information.



**DO NOT** position printing over the Smart Card Chip.



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## APPENDIX C

### **Accessories & Supplies**

Please contact your Polaroid dealer to place an order for accessories and supplies.

#### **RIBBONS**

The following ribbons may be used in the P75i Printer:

Color Ribbons (Sold by the Roll)		
Part Number	Description	
3-150	5-Panel Color Ribbon (YMCKO)	200 images
3-151	5-Panel Color Ribbon (YMCKO)	330 images
3-152	5-Panel Color Ribbon (YMCKO)	200 images (bulk)
3-153	4-Panel Color Ribbon (YMCK)	250 images
3-154	2-Panel Resin Ribbon (K Resin + O)	500 images
3-155	2-Panel Black Ribbon (K Dye + O)	500 images

Note: Y = Yellow, M = Magenta, C = Cyan, K = Black, O = Overlay

#### **ACCESSORIES**

Accessories available for P75i Printers appear below. Always refer to the part number when placing an order:

Cleaning Supplies	
Part Number	Description
3-300	Cleaning Card Kit (box of 100 cards)
3-301	Cleaning Swab Kit (box of 25 swabs)
3-302	Premier Cleaning Kit (25 swabs, 50 cards)
3-303	Adhesive Cleaning Roller Kit (set of 5)
3-304	Cleaning Cartridge, complete

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